

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

THE AGRICULTURAL SITUATION

A Brief Summary of Economic Conditions

ISSUED MONTHLY BY THE BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

JANUARY
RECEIVED

MAR 14 1928 ★

CERTIFICATE: By direction of the Secretary of Agriculture the matter contained herein is published as statistical information and is required for the proper transaction of the public business. Free distribution is limited to copies "necessary in the transaction of public business required by law." Subscription price 25 cents per year payable in cash or money order to the Superintendent of Documents, Government Printing Office, Washington, D. C.

Washington, D. C.

MARCH 1, 1928

Volume 12, No. 3

SPRING WORK BEGINNING—MARKETS VARIED

The comparatively open winter left a considerable depth of frost on the ground through much of the North, which means a period of wet land and muddy roads. It also resulted in widespread damage to winter wheat and to clover and alfalfa meadows.

Plowing and planting are going forward slowly in the South. Some cotton is in ground around the Gulf. The tendency seems to be to increase the acreage of important truck crops. Farmers in 10 States report an intended increase of about 5 per cent in early potato acreage. The spring lettuce acreage is around 50 per cent greater than last year, increased especially in Arizona and California.

The winter marketing season is drawing to a close under varying circumstances. Corn has moved in large volume, especially from the western Corn Belt, and at rising prices. The expected heavy run of hogs has also materialized, with prices nearly \$4 per cwt. below last year. The number of hogs slaughtered under Federal inspection during January was 21.4 per cent greater this year than last. The price ratio between corn and hogs is no longer in favor of the feeder.

Larger stocks of potatoes were carried through the winter compared with last year and have moved out at lower prices for the most part. This is especially true in the West. Eastern growers have had an encouraging year, if one may judge by their expressed intention to increase the potato acreage by around 10 per cent this spring. Such increase, if accompanied by fairly good yields, would be apt to mean very ample supplies next fall.

One encouraging development this winter has been in the lamb market. There were twice as many lambs on feed in the West as a year ago, and notwithstanding fewer in the Corn Belt some misgiving was expressed about the marketing of those lambs. Reports about the middle of last month showed over $1\frac{1}{4}$ million lambs in the three important western districts compared with half the number last year. But in spite of larger market receipts than last year, lamb prices made a substantial advance and averaged about \$15.50 per cwt. in latter February against about \$12.80 a year ago.

The cattle market made a seasonal decline during February, but prices averaged between \$3 and \$4 per cwt. higher than last year. In general, the winter markets have been encouraging to most producers of livestock products except hogs.

The estimate of farm population issued this week indicates a net movement away from farms last year of 604,000 persons. This compares with 1,020,000 the previous year and 834,000 during 1925, showing thus a slower but still continued migration from the farms.

KEY REGIONS AT A GLANCE

The East.—Busy last month with ice harvest, work in woods, pruning orchards, and routine barn work. Has had a generally open winter, with some frost damage to winter grains and meadows. Plowing begun in more southern territory. Marketing of cash crops like potatoes and apples done at fairly good prices, but other crops, like hay and cabbage, a drug on the market. Dairy industry has had relatively profitable winter and tendency is to raise more heifer calves.

The South.—Had considerable cold weather, some hard frosts, and quite general rains last month. Plowing and planting of early crops proceeded slowly. Progress of winter truck and grains likewise slow. However, shipments of truck crops are now heavy, strawberries are beginning to ripen in Gulf territory, and some cotton is already planted in Texas. Extent of probable cotton acreage again the subject of local agitation.

Corn Belt.—Getting ready for spring work, though little been accomplished yet on account of cold, wet weather. General lack of snow cover has been hard on wheat and meadows. Much winter wheat, especially late planted, is reported killed. Western belt been moving heavy volume of corn to market. Likewise heavy run of hogs. Higher corn prices and lower hog prices have made feeding advantage doubtful. Hog prices normally advance at this season. General sentiment suggests probability of some curtailment of hog production during coming year.

Wheat Belt.—General rains and some snow last month greatly helped winter wheat. Improvement very marked in Kansas and Oklahoma, though there are still many bare fields in the West. Dry areas still suffering in western and southern Nebraska. Some plowing in south. North making preparations for spring work, but field work mostly still inactive. Grain, livestock, and other products of region moved to market in volume last month. Heavy corn movement from eastern Kansas and Nebraska.

Range Country.—Snow or moisture enough in the eastern mountain States to assure ranges, but lack of snow in Utah and Nevada. General condition of livestock good from Montana to New Mexico; ranges good in south and open to some extent in north. Some feeding reported in all States, but no serious shrinkage of stock. Sheep shearing under way in south; likewise preparation of soil in southern valleys. Lamb feeders generally encouraged at strength of market and hoping to get out with a profit.

Pacific Coast.—North has emerged from winter with wheat as well as orchards apparently in good condition. Busy with pruning, spraying, and cultivation of orchards and planting of early field crops. Some complaint of dry conditions in California and of cold weather, especially in southern part of State. Spring work well under way in that State. Almonds in blossom and apricot and prune trees approaching bloom.

AVERAGE PRICES OF FARM PRODUCTS RECEIVED BY PRODUCERS

Actual prices received by producers at local farm markets as reported to the division of crop and livestock estimates of this bureau. Average of reports covering the United States, weighted according to relative importance of district and State.

	5-year average August, 1909— July, 1914	Janu- ary average 1910— 1914	Janu- ary, 1927	Decem- ber, 1927	Janu- ary, 1928
Cotton, per lb—cents	12.4	12.2	10.6	18.7	18.6
Corn, per bu—do	64.2	58.9	64.3	75.1	75.2
Wheat, per bu—do	88.4	88.4	122.2	113.9	115.2
Hay, per ton—dollars	11.87	11.87	13.38	10.55	10.60
Potatoes, per bu—cents	69.7	64.2	139.1	94.1	93.6
Oats, per bu—do	39.9	39.0	42.6	48.1	49.3
Beef cattle, per 100 lbs—dollars	5.22	5.04	6.45	8.32	8.48
Hogs, per 100 lbs—do	7.23	7.03	10.97	8.14	7.81
Eggs, per doz—cents	21.5	27.9	36.9	43.3	38.2
Butter, per lb—do	25.5	27.8	44.0	45.7	45.2
Butterfat, per lb—do			46.9	47.8	48.5
Wool, per lb—do	17.7	18.5	30.9	32.0	33.2
Veal calves, per 100 lbs—dollars	6.75	6.78	9.75	10.71	10.88
Lambs, per 100 lbs—do	5.91	5.79	10.65	11.39	11.34
Horses, each—do	142.00	139.00	73.00	75.00	77.00

The farm price of wool continued to advance during January. It might be noted that this general upward trend in the farm price has been continuous since May, with the exception of a slight decline in October. The improvement in the wool textile manufacturing industry with the increased purchase of domestic wool and the smaller holdings of combing clothing wool and stronger foreign prices are probably the principal factors influencing the rise.

The slight improvement in the farm price of corn was due entirely to the advance in the South Central States, where the price advanced from 79.5 cents to 82.8. In the north central group the price declined 6 cents, while in the rest of the country the price remained just about the same. The increase in the South Central States probably is due in part to the higher prices being offered for corn at the Gulf ports, which in turn may be partly explained by the higher Liverpool prices.

The farm price of horses advanced during the past month and at the present level are \$4 above January a year ago. It might be noted that the farm price did not make the usual decline in December, and on January 15 the price was higher than it has been in January for the past four years.

The farm price of mules continued the advance begun in September, and on January 15 were \$92 as compared with \$83 a year ago. There has been a heavy fall movement of horses and mules into the South. Market receipts at the stockyards of Fort Worth, Oklahoma City, Memphis, Montgomery, and Atlanta for October, November, and December, 1927, were 67,469 head as compared with 17,388 last year, 49,725 in 1925, 55,275 in 1924, and 72,674 in 1923.

The increased southern demand at higher prices is probably reflected to some extent in the States from which the mule shipments originate, namely, Tennessee, Kentucky, Missouri, Oklahoma, Kansas, and Nebraska.

PRICE INDEXES FOR JANUARY, 1928

Farm products figures from this bureau; commodity groups from Bureau of Labor Statistics (latter shown to nearest whole number). Shows year ago and latest available month.

FARM PRODUCTS

[Prices at the farm; August, 1909-July, 1914=100]

	Janu- ary, 1927	Decem- ber, 1927	Janu- ary, 1928	Month's trend
Cotton-----	85	151	150	Lower.
Corn-----	100	117	117	Unchanged.
Wheat-----	138	129	130	Higher.
Hay-----	113	89	89	Unchanged.
Potatoes-----	200	135	134	Lower.
Beef cattle-----	124	160	163	Higher.
Hogs-----	152	112	108	Lower.
Eggs-----	172	201	178	Do.
Butter-----	173	179	177	Do.
Wool-----	174	180	186	Higher.

COMMODITY GROUPS

[Wholesale prices; 1926=100]

	Janu- ary, 1927	Decem- ber, 1927	Janu- ary, 1928	Month's trend
Farm products-----	97	104	106	Higher.
Foods-----	97	110	109	Lower.
Hides and leather products-----	101	117	121	Higher.
Textile products-----	94	97	97	Unchanged.
Fuel and lighting-----	98	83	81	Lower.
Metals and metal products-----	99	98	98	Unchanged.
Building materials-----	98	90	91	Higher.
Chemicals and drugs-----	98	97	96	Lower.
House-furnishing goods-----	98	99	99	Unchanged.
All commodities-----	97	97	96	Lower.

GENERAL BUSINESS INDICATORS RELATED TO AGRICULTURE

	Janu- ary, 1927	Decem- ber, 1927	Janua- ry, 1928	Month's trend
PRODUCTION				
Pig iron, daily (thousand tons)-----	100	87	83	Decrease.
Bituminous coal (million tons)-----	57	41	44	Increase.
Steel ingots (thousand long tons)-----	3,760	3,150	3,960	Do.
CONSUMPTION				
Cotton, by mills (thousand bales)-----	603	544	582	Do.
Unfilled orders, Steel Corporation (thousand tons)-----	3,800	3,973	4,276	Do.
Building contracts in 27 Northeastern States (million dollars)-----	327	415	364	Decrease.
Hogs slaughtered (thousands)-----	2,694	2,747	3,443	Increase.
Cattle slaughtered (thousands)-----	1,136	980	1,080	Do.
Sheep slaughtered (thousands)-----	921	896	994	Do.
MOVEMENTS				
Bank clearings (New York) (billion dollars)-----	26	32	31	Decrease.
Car loadings (thousands)-----	¹ 3,757	4,173	3,448	Do.
Mail-order sales (million dollars)-----	35	59	37	Do.
Employees, New York State factories (thousands)-----	486	467	457	Do.
Average price 25 industrial stocks (dollars)-----	175	242	242	Unchanged.
Interest rate (4-6 months' paper, New York) (per cent)-----	¹ 4.13	¹ 3.97	3.88	Decrease.
Retail food price index (Department of Labor) ² -----	159	156	155	Lower.
Wholesale price index (Department of Labor) ³ -----	97	97	96	Do.

¹ Revised.² 1913=100.³ 1926=100.

Taking the current expressions of business observers, it appears that the weight of opinion is quite conservative. Considerable attention is paid to such developments as higher interest rates, the slump in the stock market, the rather widespread reports of unemployment, the difficulties besetting certain important industries like coal and textiles, and so on.

On the other hand, observers are not lacking to note the improvement in the steel industry, the increase in automobile production, the rather well maintained volume of construction, etc.

In spite of some business recession this winter the market for farm products does not seem to show any widespread reflection of industrial depression—as witness the rise in lamb prices.

GENERAL TREND OF WAGES AND PRICES

[1910-1914 = 100]

Year and month	General wage level ¹	Farm wages ²	Retail price of food ³	Whole-sale price of food ³	Whole-sale price, all commodities ⁴
1910		97	96	100	103
1911		97	95	96	95
1912		101	101	103	101
1913		104	103	99	102
1914	⁵ 100	101	106	101	100
1915	101	102	104	104	103
1916	114	112	117	120	129
1917	129	140	151	166	180
1918	160	176	174	187	198
1919	185	206	192	205	210
1920	222	239	210	218	230
1921	203	150	158	143	150
1922	197	146	146	137	152
1923	214	166	151	143	156
1924	218	166	150	143	152
1925	223	168	162	156	162
1926	229	171	166	152	154
1927	231	170	160	148	149
January:					
1921	217		177	161	173
1922	192		146	130	141
1923	206	137	148	140	159
1924	219	159	154	142	154
1925	223	156	159	159	163
1926	229	159	169	155	159
1927					
January	232	162	164	149	150
February	231		161	147	149
March	234		159	146	148
April	230	166	158	146	147
May	230		160	147	147
June	230		163	145	146
July	228	172	158	144	147
August	231		157	145	149
September	233		159	149	152
October	231	175	161	152	153
November	226		161	153	152
December	233		161	151	152
1928					
January	230	161	160		

¹ Average weekly earnings, New York State factories.² Index based on both monthly and daily wages.³ Bureau of Labor Statistics index numbers converted to 1910-1914 base.⁴ Bureau of Labor Statistics.⁵ June.

GENERAL TREND OF PRICES AND PURCHASING POWER
 [On 5-year base, August, 1909-July, 1914=100]

Year and month	Index numbers of farm prices							Wholesale prices of non-agricultural commodities ¹	Relative purchasing power of farmer's product ²
	Grains	Fruits and vegetables	Meat animals	Dairy products	Poultry products	Cotton and cotton-seed	All groups, 30 items		
1910-----	104	91	103	100	104	113	103	102	101
1911-----	96	106	87	97	91	101	95	96	99
1912-----	106	110	95	103	101	87	99	100	99
1913-----	92	92	108	100	101	97	100	105	95
1914-----	103	100	112	100	105	85	102	97	105
1915-----	120	83	104	98	103	78	100	101	99
1916-----	126	123	120	102	116	119	117	138	85
1917-----	217	202	173	125	157	187	176	182	97
1918-----	226	162	202	152	185	245	200	188	107
1919-----	231	189	206	173	206	247	209	199	105
1920-----	231	249	173	188	222	248	205	241	85
1921-----	112	148	108	148	161	101	116	167	69
1922-----	105	152	113	134	139	156	124	168	74
1923-----	114	136	106	148	145	216	135	171	79
1924-----	129	124	109	134	147	211	134	162	83
1925-----	156	160	139	137	161	177	147	165	89
1926-----	129	189	146	136	156	122	136	161	85
1927-----	128	155	139	138	141	128	131	152	86
January-----									
1920-----	241	226	181	196	267	293	219	236	93
1921-----	138	136	123	172	243	93	135	196	69
1922-----	91	159	95	140	176	129	114	158	72
1923-----	113	117	110	151	175	203	134	177	76
1924-----	110	118	101	152	162	255	137	164	84
1925-----	172	122	123	134	213	182	146	165	88
1926-----	143	214	140	147	172	138	143	165	87
1927-----	120	140	140	144	173	85	126	156	81
January-----									
July-----	139	195	131	130	112	125	130	151	87
August-----	138	172	136	129	122	136	132	151	88
September-----	134	145	142	135	143	179	140	152	92
October-----	128	138	145	139	167	169	139	151	92
November-----	120	³ 136	141	141	189	162	³ 137	151	91
December-----	123	141	138	145	195	153	137	151	91
January-----	125	144	138	145	177	152	137	⁴ 151	⁴ 91

¹ Computed by Bureau of Labor Statistics from wholesale prices of all commodities except those from United States farms. 1910-1914=100.

² The value of a unit of the farmer's product in exchange for nonagricultural products at wholesale prices, compared with pre-war values. Obtained by dividing index of all groups (30 items) by the index of the wholesale prices of non-agricultural products.

³ Revised.

⁴ Subject to revision.

THE TREND OF MOVEMENT TO MARKET

Figures show wheat, corn, hogs, cattle, sheep receipts at primary markets; butter receipts at five markets, compiled by this bureau.

Year and month	Receipts					
	Wheat <i>1,000 bushels</i>	Corn <i>1,000 bushels</i>	Hogs <i>1,000</i>	Cattle <i>1,000</i>	Sheep <i>1,000</i>	Butter <i>1,000 pounds</i>
Total—						
1920-----	332, 314	210, 332	42, 121	22, 197	23, 538	402, 755
1921-----	435, 606	340, 908	41, 101	19, 787	24, 168	468, 150
1922-----	413, 106	378, 598	44, 068	23, 218	22, 364	526, 714
1923-----	386, 430	271, 858	55, 330	23, 211	22, 025	545, 380
1924-----	482, 007	278, 719	55, 414	23, 695	22, 201	587, 477
1925-----	346, 381	223, 604	43, 929	24, 067	22, 100	574, 489
1926-----	362, 876	234, 873	39, 772	23, 872	23, 868	572, 935
1927-----	455, 991	241, 245	41, 411	22, 763	23, 935	581, 592
January—						
1920-----	22, 697	20, 623	5, 262	1, 881	1, 614	24, 692
1921-----	30, 393	39, 991	4, 700	1, 644	1, 792	25, 482
1922-----	17, 911	46, 537	4, 278	1, 628	1, 835	34, 624
1923-----	38, 002	37, 526	5, 306	1, 876	1, 636	40, 304
1924-----	15, 548	30, 594	6, 253	1, 888	1, 697	37, 451
1925-----	23, 247	35, 820	6, 105	1, 869	1, 467	37, 781
1926-----	19, 076	28, 268	4, 304	1, 840	1, 548	39, 424
1927-----	19, 379	23, 658	4, 252	1, 832	1, 740	37, 705
1927						
July-----	52, 996	14, 724	3, 046	1, 547	1, 676	67, 282
August-----	78, 909	17, 023	3, 041	2, 065	2, 209	57, 446
September-----	79, 962	21, 259	2, 565	1, 988	2, 848	42, 234
October-----	71, 696	19, 132	3, 039	2, 635	3, 587	38, 301
November-----	42, 394	15, 924	3, 666	2, 346	1, 896	33, 607
December-----	23, 903	36, 777	4, 209	1, 691	1, 609	33, 687
1928						
January-----	22, 313	37, 116	5, 306	1, 771	1, 705	42, 271

Movement of wheat to market during January was slightly heavier than same month last year. Corn movement heavy, probably due partly to unusual proportion of the crop being located in western territory. Market movement of hogs and lambs heavy but fewer cattle than year ago. Fairly heavy receipts of butter.

THE TREND OF EXPORT MOVEMENT

Compiled from the Department of Commerce reports by division of statistical research of this bureau.

Year and month	Wheat ¹ including flour	Tobacco (leaf)	Bacon, ² hams, and shoulders	Lard	Total meats ³	Cotton ⁴ running bales
Total—	<i>1,000 bushels</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 bales</i>
1920--	311, 601	467, 662	821, 922	612, 250	1,043, 500	6, 111
1921--	359, 021	515, 353	647, 680	868, 942	786, 280	6, 385
1922--	235, 307	430, 908	631, 452	766, 950	733, 832	6, 015
1923--	175, 190	474, 500	828, 890	1,035, 382	958, 472	5, 224
1924--	241, 454	546, 555	637, 980	944, 095	729, 832	6, 653
1925--	138, 784	468, 471	467, 459	688, 829	547, 361	8, 362
1926--	193, 861	478, 769	351, 591	698, 971	428, 613	8, 916
1927--	222, 792	506, 751	237, 798	681, 303	302, 936	9, 198
January—						
1920--	12, 358	46, 757	91, 407	38, 824	123, 929	922
1921--	27, 361	46, 852	60, 072	76, 185	90, 800	600
1922--	15, 231	32, 265	48, 120	73, 194	55, 777	459
1923--	12, 751	41, 309	74, 432	107, 786	86, 938	471
1924--	12, 486	47, 579	79, 067	132, 758	90, 429	540
1925--	13, 126	35, 448	56, 169	78, 440	65, 705	1, 052
1926--	5, 587	46, 891	46, 654	76, 670	53, 833	735
1927--	12, 821	66, 403	20, 597	59, 842	25, 748	1, 074
1927						
July-----	12, 100	28, 229	24, 040	46, 972	30, 043	372
August-----	28, 347	27, 817	16, 841	50, 816	23, 123	322
September--	39, 765	38, 394	23, 952	59, 736	30, 213	620
October---	36, 347	47, 044	16, 322	50, 355	21, 418	1, 113
November--	21, 344	54, 307	13, 744	49, 636	17, 982	984
December--	12, 211	47, 644	19, 947	62, 855	24, 453	745
1928						
January---	11, 809	42, 600	22, 212	70, 660	27, 102	712

¹ Wheat flour is converted on a basis of 4.7 bushels of grain equal 1 barrel of flour.

² Includes Cumberland and Wiltshire sides.

³ Includes fresh, canned, and pickled beef, bacon, hams, and shoulders; fresh, canned, and pickled pork; fresh mutton and lamb.

⁴ Excludes linters.

TREND OF DAIRY PRODUCTION

[Million pounds, 000,000 omitted]

PRODUCTION

	January—		
	1928	1927	Per cent change
Creamery butter-----	104	1 97	+ 6. 8
Farm butter-----	36	37	- 0. 7
Total butter-----	140	134	+ 4. 8
Cheese-----	24	21	+ 11. 8
Condensed and evaporated milk-----	103	108	- 4. 4
Total milk equivalent-----	3,438	3,290	+ 4. 5

APPARENT CONSUMPTION

[Including production, changes in stocks, and net imports or exports]

Butter-----	160	150	+ 6. 2
Cheese-----	37	36	+ 2. 0
Condensed and evaporated milk-----	118	120	- 2. 4
Total milk equivalent-----	4,021	3,883	+ 3. 6

¹ Preliminary—final figures about July 1.T. R. PIRTLE,
Division of Dairy and Poultry Products, B. A. E.

COLD STORAGE SITUATION

[February 1 holdings (shows nearest million; i. e., 000,000 omitted)]

Commodity	5-year average	Year ago	Month ago	Feb. 1, 1928
Creamery butter-----pounds	27	18	46	28
American cheese-----do-----	41	46	48	42
Case eggs-----cases	¹ 325	¹ 253	¹ 882	¹ 25
Total poultry-----pounds	123	145	117	118
Total beef-----do-----	107	95	77	71
Total pork-----do-----	683	589	523	655
Lard-----do-----	71	70	55	84
Lamb and mutton-----do-----	3	4	4	4
Total meats-----do-----	866	751	666	794

¹ 3 figures omitted.

THE DAIRY SITUATION

The passing of February leaves the dairy situation with but few remaining steps to the close of the current season and the threshold of the new. While during the immediate past the markets have been going through a period of price readjustment, largely to meet a new supply situation, the general position of dairying remains secure and is regarded as at least moderately favorable.

Butter markets during February have been unusual in several ways. Prices, for one thing, have not followed the usual course. Normally there is an advance from January to February, the average for the latter month being frequently as much as 1 to 2 cents above the January average. This year the reverse has been true and where the January average at New York was 48.76 cents it appears fairly certain at the present writing (February 25) that the average for February will be nearer to 47 cents. The most prominent factor contributing to this condition has been production. It is estimated that production during January was about 7 per cent greater than a year earlier, and market receipts have indicated that this increase has continued on through February. Heavier market supplies, resulting from this heavier production, have kept the situation unsettled throughout the period.

The storage deal is of only slight effect as we approach its completion. Remaining reserves are largely of the poorer qualities and thus do not directly compete with the new supplies. For this reason changes in storage movement, as long as holdings are not materially and obviously in excess of normal, are not watched as closely as earlier in the year. Nevertheless, it may be interesting to note that holdings on February 1 were reported as 28,296,000 pounds, some 10,000,000 pounds above the previous year, but very close to the five-year average for February.

Declining domestic prices and some slight advances abroad have caused a complete cessation of movement of foreign butter to this country. Recent asking prices have necessarily been above possible selling values here. This point is mentioned particularly to emphasize that foreign markets had little or no part in the downward price movement of February.

Cheese markets have followed closely the example set by butter. Production has exceeded 1927 by a large margin, 11.8 per cent for January and apparently nearly as much for February. This increase can only be accounted for by favorable weather and favorable feeding conditions and feed price relationships, especially in Wisconsin. There has been no price stimulus for greater production since primary market values have been at the same level or slightly lower than a year ago throughout the past two months. Reserve stocks of cheese are slightly more favorable than for last year, although a continuance of the heavy production could soon make up the difference.

In the case of the concentrated milks we find decreased production from a year ago. For condensed and evaporated milk this amounts to about 4 per cent.

The dairy market picture has two prominent features in the foreground. Production is seen as large, increased over a year ago, and prices are declining, partly seasonal but rather more than normal for the season.

C. E. ECKLES,
Division of Dairy and Poultry Products, B. A. E.

THE EGG AND POULTRY MARKET SITUATION

The interest in the egg markets at this season of the year is largely with regard to the new storage deal just ahead. The immediate situation receives scant attention, but the only approach we have to the look ahead is through the immediate past and the present.

January egg markets were featured by high price levels and there was no evidence of the normal seasonal price break until after the opening of February. This was largely because of short supplies. Receipts in January were very light and considerably lighter than a year earlier. Storage reserves were practically gone. Demand was good, and very naturally prices were sustained. Since the opening of February, however, receipts have shown a material increase, although still remaining lighter than in 1927. Prices have tended sharply lower, until at the current level, slightly higher than last year, a point of stability seems to have been reached. While supplies have been fully ample of late, demand has been active and there have been no accumulations. Already, especially on the Pacific coast, into-storage movement of eggs is seen.

The low point in storage holdings was apparently reached about February 11, somewhat earlier than usual, and it is interesting to note that the low point this year has been the lowest reported for many years. The total holdings in the country on February 1 were 25,000 cases, and it is probable that the March 1 holdings, normally the lowest of the year, will be somewhat above those of February. For the most part, and particularly for those who held on until the storage deal was well along, storers of eggs found their operations profitable. It is commonly thought that a profitable storage egg year, particularly one which finishes strong, nearly always has a psychological effect upon operators in the opening of the new storage deal. That is, they are said to be less cautious and frequently willing to pay higher prices than would normally be the case under similar supply conditions. In any event prices now are slightly above a year ago, and present indications are that the cost of eggs into storage this year will be somewhat above a year ago. Keen buying competition, especially at country points, is already anticipated.

Frozen egg holdings are fairly heavy, being 38,451,000 pounds on February 1 compared with 31,207,000 pounds February 1, 1927, and a five-year average of 24,591,000 pounds. Thus while the shell egg reserve is gone there is still an adequate supply in frozen form. The growth of the frozen egg industry has been marked during recent years, and it is expected that holdings will be larger each year as long as this growth continues.

The frozen poultry situation is still in a moderately strong position. Storage stocks were nearly 30,000,000 pounds lighter on February 1 than a year earlier. This in itself is indicative of a firmer position than in 1927.

The live poultry markets have been featured by heavier supplies than a year ago. These heavy supplies, particularly of fowl, which are comprising around 75 per cent of the total receipts, have moved slowly at times and the market has been draggy more often than not. Prices have fluctuated considerably, as is usually the case with this commodity, but there has been no definite change in the price trend.

C. E. ECKLES,

Division of Dairy and Poultry Products, B. A. E.

POTATO STOCKS

Production, quantity sold or available for sale, and merchantable stocks in hands of growers and dealers on January 1

[From report of this bureau, February 15, 1928]

	Production		Merchantable stocks, January 1	
	Crop year	1,000 bushels	Year	1,000 bushels
19 surplus States-----	1919	225, 248	1920	58, 530
	1920	269, 222	1921	95, 061
	1921	263, 052	1922	82, 657
	1922	325, 479	1923	118, 151
	1923	287, 564	1924	98, 252
	1924	298, 879	1925	103, 890
	1925	233, 684	1926	64, 534
	1926	251, 788	1927	74, 287
	1927	278, 171	1928	85, 393
16 deficient late potato States-----	1919	73, 291	1920	6, 875
	1920	107, 644	1921	12, 930
	1921	74, 928	1922	7, 366
	1922	98, 406	1923	14, 792
	1923	99, 081	1924	12, 006
	1924	94, 888	1925	15, 333
	1925	66, 951	1926	6, 810
	1926	73, 893	1927	9, 830
	1927	92, 105	1928	11, 232
Totals, 35 States-----	1919	298, 539	1920	65, 405
	1920	376, 866	1921	107, 991
	1921	337, 980	1922	90, 023
	1922	423, 885	1923	132, 943
	1923	386, 645	1924	110, 258
	1924	393, 767	1925	119, 223
	1925	300, 635	1926	71, 344
	1926	325, 681	1927	84, 117
	1927	370, 276	1928	96, 625

NOTE.—In using the above estimates of "Merchantable stocks on January 1" allowance should be made for normal shrinkage and loss, and for the considerable quantity of low-grade potatoes usually utilized as feed for livestock or wasted when the price is low. The estimates of merchantable stocks also include potatoes held for sale within the area that can be reached by truck.

THE FRUIT AND VEGETABLE SITUATION

Signs of spring are appearing in the fruit and vegetable situation. Shipments have been increasing; surveys are being made of spring-crop acreages in the South and West; early deciduous fruits reaching a stage where frosts might do much damage. Prices of 1927 apples and of citrus fruits either have been showing seasonal advances or are being well maintained, with prices of southern truck crops beginning to tend downward. In general, the market position of most fruits and vegetables, except possibly potatoes and cabbage, is more favorable than a year ago, but heavy acreages for spring shipment may soon place vegetables in a less favorable position. Farmers appear to be largely ignoring any suggestions to reduce plantings of truck crops.

Potatoes.—Growers in 10 early-shipping States apparently plan to increase their combined acreage about 5 per cent over last season and may have a total of 254,000 acres. This would be the heaviest planting in five years. Marked increases are noted in Alabama, the Carolinas, and Virginia, also in southern California. Florida shows little change. Decreases in the lower Rio Grande Valley of Texas are nearly offset by gains in other parts of the State. Louisiana expects to plant fewer acres of early potatoes than in any year since 1925.

Light arrivals of new potatoes were selling somewhat lower than last season. With supplies of old stock about 15 per cent heavier and prices a little lower than in 1927, it is doubtful whether the general market position this spring will be quite as strong as a year ago. On the other hand, there has been an upward tendency during recent weeks, amounting sometimes to 10 cents or 15 cents per 100 pounds of old potatoes, and holders may be favored by a fairly early clean-up of good quality stock. Heavy losses are reported in storage, particularly in the West, and large quantities of low-grade potatoes are being used for feeding purposes.

The situation in Maine has strengthened to such an extent that shipping-point prices there are a bit higher than last year. Growers in Idaho and Colorado had a rather discouraging season, but a 25-cent advance in mid-February lent cheer to the situation. Several of the important eastern and northern States report fewer merchantable potatoes than they had a year ago; if their remaining supplies are exhausted earlier than usual, the demand for western stock may increase in an unexpected degree.

Though the price level this season has been considerably below that of 1926-27, growers east of Nebraska evidently have made some money, enough at least to encourage heavier planting in 1928. The intended increases in Northeastern and North Central States average fully 10 per cent above the 1927 acreage. There is likely to be some decrease in the West, as acreage and production in that region during recent years have been gaining more rapidly than is profitable.

Apples.—The apple markets are showing real strength. Western boxes average about \$1 higher than last season and prices of desirable varieties of eastern stock are nearly double those of a year ago. Good eastern and midwestern apples have been selling as high as \$6 to \$11 per barrel in terminal markets. Baldwins reached \$7.25, f. o. b. New York shipping points. Shipments to date are about 30 per cent, or

37,000 cars, below last year's corresponding record, and movement during the remainder of the season is not expected to exceed 12,000 cars. Eastern producing sections have forwarded only a little over half as many cars as last season, because of their light crop.

The firm market position of apples is aided by the relatively limited supplies in storage. Combined cold-storage stocks on February 1 were 28 per cent lighter than a year ago and 19 per cent less than the February average for recent seasons. Cold-storage holdings of barreled fruit were only about two-fifths those of a year ago. The number of boxes was nearly the same as in other years. As an indication of the rapid movement of bushel baskets from storage, February 1 stocks were only 14 per cent greater than those of the same date in 1927, whereas the December holdings of baskets were 44 per cent above the record of the preceding year.

Eastern apples seem to have met a somewhat better demand than western boxed fruit in British markets, but the season for good quality barreled apples is approaching an end. Prices of boxed apples may yet show a considerable advance, provided they can be marketed before active competition begins from Australian and New Zealand supplies. Those countries expect to be able to export about twice as many apples and pears as they did from their light 1927 crops and most of the exportable surplus goes to the United Kingdom. First cargoes of the season are already en route.

Heavier crops of tree fruits, including apples, are expected in the United States this season, and supplies may be in sharp contrast to the very light eastern crops of last year.

Provided weather conditions continue favorable, a bumper crop of strawberries also is in prospect from the 200,000 acres in commercial berry sections.

Early reports indicate a slightly greater acreage of watermelons in Florida.

Citrus fruits have had a good season in Florida, largely as a result of reduced production. Many weeks, the shipping-point quotations on desirable sizes of oranges and grapefruit have exceeded \$4 a box. Florida's season is more than half finished and trade reports indicate the possibility of \$5 oranges in the near future. Local (unofficial) estimates are for only 6,500 cars of oranges and 3,600 cars of grapefruit during the remainder of the season. Corresponding quantities last year were about 8,000 cars each.

Movement of California oranges also is running 15 per cent behind last season's record to this date, but peak of the California output usually is reached in April. The Florida citrus industry may be aided to some extent by establishment of direct boat shipments between Jacksonville and Liverpool. First cargoes during January and February arrived in England in excellent condition.

Onions staged a notable recovery after the rather low prices and sluggish markets of fall and early winter. However, a part of the price gain was being lost in late February. Supplies of good quality onions evidently were not so heavy as originally believed and shipments during the rest of the season may not greatly exceed those of a year ago.

At this writing, hearings are being held with a view to increasing the tariff on imported onions from 1 cent to 1½ cents per pound. No advices have been received as yet concerning the probable size of the

Egyptian crop, but last spring the imports from Egypt were about double those of the year before. Late estimates indicate that Texas acreage of Bermuda onions is one-third greater than last season. Three early shipping States together probably have 18 per cent more onion acreage than in 1927.

Northern cabbage was in oversupply this winter and prices were low. A slight rise during February did not amount to much. Storage holdings, particularly in western New York, were very heavy. Any increase of shipments has not been sufficient to take care of the surplus, and it appears that considerable quantities will never move to market.

Texas cabbage has been of variable quality. Prices started high but soon declined to a low level, as car-lot movement began to exceed the corresponding figure for last season. Total output from Texas, however, is not expected to approach that of 1927.

Some of the early cabbage sections along the Gulf report a lighter acreage this spring, but increases seem fairly certain in the Carolinas and Virginia.

Other truck crops.—With the opening of the asparagus season at hand, it is of interest to note that acreage has been increased very little over that of last year. Slight gains are reported in the Georgia-South Carolina region and in a few of the late-shipping States, but California's acreage of table stock is about the same as in 1927.

Florida celery movement was nearing its peak. The relatively light competition from California enabled shippers in Florida to advance the price of their product to \$2 per crate. Lower prices were expected, however, as shipments increase.

Spring lettuce acreage in four States appears to be about 50 per cent greater than last season, chiefly because of heavy plantings in Arizona and California. The Imperial Valley market was showing considerable strength, as competition from other States was negligible during February.

Texas spinach prices broke recent record in January, following the severe freeze, but the crop recovered better than expected and shipments were rapidly increasing. Compared with top of \$1.75 per bushel basket a month ago, the late February level at southern Texas shipping points was about one-third as high.

Sweet potatoes made a rather steady advance, once the Virginia crop was out of the way. Recent market prices have been one-fourth to one-third higher than those of a year ago.

A late January freeze caused serious damage to tomatoes on the lower east coast of Florida. Movement is not expected to become normal until April; prices have been at a high level.

PAUL FROEHLICH,
Division of Fruits and Vegetables, B. A. E.

THE GRAIN MARKET

An advance in corn prices to the highest point on the crop, during the period when prices usually decline, has been the outstanding feature in the grain market during the past two months. This strength in corn has caused a firm market also for other feed grains, including oats, barley, and grain sorghums. A continued active demand for wheat by European buyers has been a strengthening factor

in the wheat market. Southern Hemisphere movement has been heavy, but with a smaller supply there this season considerably less remains available for market for the remainder of the season. This may turn the European demand to North American wheat earlier than last season.

Corn.—With the total supply of corn at the 1st of November about 25,000,000 bushels larger than last season and the prospective requirements but little, if any, larger than last year the recent rapid advance in prices apparently has been caused by conditions other than those usually attending a supply and demand situation of this character.

One of these factors is the unusual geographic distribution of the 1927 crop. Only about 21 per cent of the corn for grain was produced in the east North Central States. This is the second smallest production in many years in this area and was only slightly larger than the short crop in 1924. On the other hand, the production of corn in the west North Central States was the second largest for a long period. A larger percentage of the market corn usually comes from the eastern part of the Corn Belt, where the crop is short, while a large percentage of the crop in the western part of the belt, where production was large this year, is usually fed. The distribution of the hog numbers is just the opposite from that of the corn crop compared with last season, the increase this season being in the eastern Corn Belt States with the smaller numbers in States in the western part of the belt.

This distribution of the crop and the hog population has tended to prevent the accumulation of stocks at Chicago and other eastern markets but has caused a heavy eastward movement of grain from the western part of the Corn Belt. Last season unusually large stocks of corn, much of which was of rather poor quality, accumulated at Chicago and, together with the light demand from the southern and eastern consuming areas, caused a weak and dull market until about the 1st of May, when the unfavorable prospects for the 1927 crop became a strengthening influence in the market. With the relatively light supply east of the Mississippi River this season, the accumulation of stocks of corn in the markets has been very slow and demand from feeders and industries has been sufficient to absorb the offerings upon arrival, particularly at Chicago and other markets in the eastern Corn Belt areas.

Another strengthening factor is the poor quality of the crop, particularly through Ohio, Indiana, and Illinois. While it was estimated at the 1st of November that 72.2 per cent of the crop is of merchantable quality, trade reports indicate that because of the light weight and heavy moisture of much of the corn in this area large amounts are being required for feeding and that the effective supply of corn is considerably less than production estimates indicate.

Still another factor which has contributed to the advance in corn prices is the export demand from Europe. The European feed crops were short this season, which has made it necessary for many of the European countries to import feed grains, principally barley and corn. This demand has been responsible for the large exports of barley from the United States since the 1st of August. European import requirements for corn, however, have been obtained principally from Argentina, where there was a fairly large crop in 1927. Argentine stocks are now running low because of these heavy ship-

ments, and the European buyers have turned to the United States for corn. Actual exports to date of United States corn have totaled less than 5,000,000 bushels, and it seems unlikely that exports to Europe will become large, compared with domestic requirements. The active bidding by exporters, however, has had quite a strengthening influence on the market and has supported prices whenever there has been a lull in domestic buying. Export bids at the present time are around \$1.03-\$1.04 per bushel for corn delivered on track at Gulf ports.

At the present time (February 25) there are indications of some abatement both in the export demand and domestic buying at the higher quotations. With hog prices near the low point of the season, the hog-corn ratio has become unfavorable for feeding. This is apparently reflected in the relatively large movement of hogs to market since the 1st of January. These hogs, however, are being marketed in generally good condition, average weights being only slightly below those of last season at Chicago and other eastern markets. The average weight of hogs arriving at Omaha and Kansas City since the 1st of January has been greater than last season, as a result no doubt of the abundant supply of corn in the western Corn Belt this year.

No statistics are available which would indicate the amount of corn remaining on farms at this time. Receipts of corn at the principal markets have been more than 50 per cent larger than last season. There has been a much heavier intermarket movement of corn from western to eastern markets this season, however, which would cause considerable duplication in receipt figures, and it is believed that the movement from country points has been of relatively smaller volume than the receipts reported at the market would indicate. Stocks in the markets at the close of the week February 18 totaled slightly less than 41,000,000 bushels compared with 46,000,000 bushels at the corresponding time last year.

Unless much larger amounts have been fed than the farm livestock population would indicate, the amount remaining for the remainder of the season in all positions is probably almost as large as a year ago, but with the unusual location of these supplies prices for the present season will probably continue well above last year's level for the next 30 or 60 days. Prices during the latter part of the present crop season, however, will be influenced materially by the prospects for the new crop.

Barley.—The barley market has held firm during the past month, influenced by a continued active demand both from exporters and domestic buyers. The high prices of corn have also been a strengthening factor, and good malting quality barley has been selling at 90 cents to \$1 per bushel in the central western markets. Feeding grades have also been readily taken and market stocks have held around 4,000,000 bushels since the first of the year, or about 2,000,000 bushels smaller than last season.

Oats.—The oats market has also held firm but has had less independent strength since the first of the year. Prices are practically the same as at the close of December, notwithstanding the advance of nearly 10 cents per bushel in corn prices. While the supply of oats is much smaller this year, current receipts have been equal to market requirements and stocks have remained practically un-

changed at the principal markets. There has recently been some advance in the price of red oats in Texas because of the reduced supply of this quality grain in the Southwest.

Wheat.—Domestic wheat prices have advanced about 3 cents per bushel since the 1st of January in the face of a decline of about 3 cents at Liverpool. The new crop movement of the Southern Hemisphere wheat was unusually large, particularly from Argentina during January and early in February. While this tended to lower the European markets, the shipments have been well absorbed upon arrival and demand has continued active. Because of the smaller crop in the Southern Hemisphere and the relatively large movement to date, the supply remaining for the remainder of the crop year is about 50,000,000 bushels smaller than last season.

With the reduced supplies in the Southern Hemisphere, the European buyers will probably be forced to turn to North American wheat earlier than usual this spring. North American wheat stocks are materially larger than last season. Stocks of Canadian wheat in store in the principal markets were about 48,000,000 bushels larger at the middle of February than a year ago, while commercial stocks of United States wheat were about 20,000,000 bushels larger than a year ago. The quality of the wheat both in the United States and Canada, however, is not so good as last season, and this may reduce the effective supply of bread grains that will be available for the remainder of the season.

Premiums for high protein wheat continue quite firm in the domestic markets. High protein types of good quality winter and spring wheat are selling higher than a year ago, but the lower protein types of both of these wheats are bringing less than last season. Soft winter wheat, which is in light supply, is bringing 10 to 15 cents more than last year at the principal soft winter wheat markets. Durum prices are much below last season, reflecting the large 1927 crop for which there has been only a limited demand.

G. A. COLLIER,
Grain, Hay, and Feed Market News Service, B. A. E.

THE EFFECT OF THE EUROPEAN CORN BORER UPON FARMING SYSTEMS

The European corn borer bids fair to become the boll weevil of the North. Farmers in the eastern Corn Belt are already modifying their methods of handling corn with a view to keeping this pest in check, and some farmers are going so far as to consider the reduction of the corn acreage or the abandonment of corn growing, for the time being at least. In the corn belt of Ontario the acreage of corn in some of the heaviest corn-producing counties declined about 70 per cent from 1923 to 1927. The relatively large amount of extra labor involved in the control practices used in the spring of 1927 caused some farmers in Ohio and Michigan to reduce their corn acreage in order to avoid so much extra labor on corn another year.

The areas where the borer has caused commercial damage to the corn crop of the eastern Corn Belt are limited to a few localities in Ohio and Michigan near Lake Erie and Lake St. Clair. Even in these localities the damage has not been anything like as heavy as

in Kent and Essex Counties, Ontario, and it is believed that the control practices which have been adopted will prevent such serious damage from occurring on this side of the line. Nevertheless, the possibility of some reduction in corn yields on account of borer damage and the necessity for using more labor and power in corn production will no doubt make shifts in farming systems desirable on some farms.

The extent to which such shifts are made will depend mainly on two things: (1) The advantage of corn over other crops either as a feed crop or as a crop for sale, and (2) the ease or difficulty with which methods of corn production may be modified so as to keep down the borer infestation and avoid serious commercial damage.

Such changes as were made in crops grown in the infested areas of Ohio and Michigan in 1927 were due almost entirely to the increased amount of labor and power needed in growing corn under corn-borer control regulations then in force and to fear of future borer damage rather than to actual damage by the borer. Another influencing factor in some areas was the prospective reduction in yields of oats or other crops, following corn, on account of changes in methods of preparing corn land for the next crop. This was especially important in localities in which the soil is very difficult to handle when corn land is plowed in the spring for a small-grain crop.

In northeastern Ohio and east central Michigan the acreage of corn per farm is small, most of the corn land is plowed for subsequent crops, a large proportion of the corn is cut, and much of it either put into the silo or shredded. Hence, the adoption of control practices requires only minor adaptation of the present practices on most farms. If these practices prove to be effective in keeping the infestation below the point of important commercial damage, farmers no doubt will find it more advantageous to follow these practices than to turn to other crops which produce less revenue or less feed per acre than does corn. This is especially true on those farms where the corn is put into the silo or is shredded.

The farmers in other sections of the infested area are more interested in a possible shift of a part of the corn acreage to other crops. The larger acreages of corn per farm, the necessity for new operations involving additional labor and power for corn production, the fact that only a part of the cornstalks are now used for feed, and the difficulties encountered in some localities in plowing corn land in the spring for a small-grain crop, all combine to make this problem more important in those sections.

Where corn is grown primarily for sale, as in some sections of northwestern Ohio, the relative values per acre of corn and alternative crops, after actual cash expenses are paid, is an important consideration. From the standpoint of average yields and average prices, sugar beets and alfalfa are the only crops now commonly grown on general farms in the infested areas which compare favorably with corn from the standpoint of gross value per acre. The gross values per acre and the value after deducting actual cash outlays for the production of sugar beets, corn, alfalfa, wheat, and barley in northwestern Ohio and southeastern Michigan are about as follows:

	Gross value per acre	Value after actual cash outlays are deducted
Sugar beets.....	\$56.00	\$31.40
Corn.....	28.00	27.80
Alfalfa.....	30.00	24.50
Wheat.....	21.25	16.85
Barley.....	17.50	14.40
Oats.....	14.00	11.10

Sugar beets compare more favorably with corn as a revenue producer than does any crop now grown to a considerable extent in the area that comprises northwestern Ohio, northeastern Indiana, and southeastern Michigan. Information obtained from farmers in this area, in the summer of 1927, indicates a slight tendency to shift a part of the corn acreage to sugar beets. Before substituting sugar beets for all or a part of the corn acreage, however, a farmer must consider the adaptability of his soil to sugar beets, the marketing facilities and market outlets available, and the cost of hauling beets to the factory or shipping station. Where all of the corn and stalks are utilized for feed, the substitution of sugar beets will necessitate the purchase of more feed or the reduction of the livestock enterprises. In addition, the labor problems involved in sugar-beet production are usually more difficult than in the case of corn or the small-grain crops.

In considering an alternative like alfalfa as a crop for sale in the place of corn, it must be recognized that any pronounced increase in the acreage of alfalfa grown for sale might make it necessary to ship to more distant markets, with resulting lower prices to the farmers in this area. Increased acreage of oats, barley, wheat, and sugar beets would not have any marked effect upon their prices until a much larger territory is affected.

Oats and barley are the other grain crops usually mentioned as possible substitutes for corn as feed grains. Considering average yields in the infested area of northwestern Ohio and southeastern Michigan, the bushels and pounds of grain grown per acre of these crops are about as follows:

	Bushels per acre	Pounds per acre
Corn.....	40	2,240
Barley.....	25	1,200
Oats.....	35	1,120

The additional pounds of corn grown per acre are sufficient to indicate the superiority of corn as a feed crop in this area. Because of the smaller amount of feed grown per acre the extensive substitution of oats or barley for corn, on farms where practically all of the corn is used for feed, would make it necessary to reduce the number of livestock or purchase additional feed or enlarge the area of grain crops grown for feed.

The disadvantage of the small-grain crops as compared with corn, from the standpoint of feed produced per acre or net value per acre, is partly offset by the small amount of labor ordinarily used in small-grain production and the fact that they are harvested early, which gives more time in the fall for seed-bed preparation and other fall work.

The small-grain crops in this area are now grown almost entirely in rotation with corn and with only a limited amount of time devoted to the preparation of a special seed bed. Any pronounced increase in the acreage of small-grain crops at the expense of corn would result in the necessity for more plowing if two or more small-grain crops are grown in succession. It would also increase the amount of work to be done during the rush season of small-grain harvest in the summer.

In the Canadian areas where the infestation and damage have been heavy there has been a marked shift from corn to sugar beets and tobacco as well as to the crops more commonly grown in rotation with corn, such as oats, barley, wheat, and hay. A preferential duty on tobacco in English markets and favorable climatic conditions have encouraged the growing of tobacco in place of corn as a cash crop. It is quite probable that some if not a large part of the shift from corn to tobacco and possibly to other crops would have been made eventually if the corn crop had not been seriously damaged and that the damage only served to hasten shifts in acreages which otherwise would have been made more slowly. Because of this fact and the efforts being made to keep down the infestation, rapid shifts in corn acreage such as occurred in Kent and Essex Counties, Ontario, are hardly to be expected in the eastern Corn Belt.

JESSE W. TAPP,
Division of Farm Management and Costs, B. A. E.

MONTANA AGRICULTURE LOOKS UP

The index showing combined yield of all principal crops in Montana last season stood at 157 per cent of their combined 10-year average yields. Not only did this index show relatively a much more favorable yield for Montana than for any other State in 1927 but probably represented, for Montana, the best yields for all crops that the State has ever experienced.

From such data as are available it would appear that in no preceding season since the State assumed agricultural importance were growing conditions more uniform as between various districts of the State.

Reduced to basic factors, the 1927 growing season was characterized by relatively large well-distributed moisture supplies combined with relatively low July and August temperatures. This situation in itself resulted in a very late season that required an extension, toward its end, of weather favorable for the maturing of late-grown

crops as well as for the completion of harvests. Fortunately this condition was met in latter September and October by a long period of mild Indian summer weather.

Thus, the 1927 growing season in Montana was a rare combination of favorable promises all qualified by "ifs." As one by one the "if" of hot winds in July and August, the "if" of frost in August and early September, the "if" of freeze or wet weather damage in September and October were all largely evaded, the season gradually established its record of being the most generally favorable if withal the most uncertain and fickle of any recorded season in Montana's history.

Briefly, the effect of the large yields on the total value of the State's agricultural production was to raise the gross total above that of any preceding year. Lower farm prices of most crops failed to offset these yields and the large total acreage harvested.

The hypothetical value of all 1927 crops in Montana was \$161,662,000, an increase of about 43 per cent over 1926 and about 18 per cent increase over the largest preceding total value of \$136,548,000 in 1924.

With nearly 80,000,000 bushels of wheat, an amount about 77 per cent larger than the 1926 crop, Montana farmers had marketed freely up to December 1. Railroad movement showed a total move of close to 45,000,000 bushels, or some 6,000,000 bushels more than the entire crop year movement from the 1926 crop and about 81 per cent more than moved to the same date in 1926.

For such other crops produced in surplus quantities in Montana, flax has apparently moved from farms as rapidly as wheat, while potatoes, apples, and beans have moved somewhat more slowly.

With the large bulk of their war-time indebtedness satisfied, Montana farmers are now making extensive replacement of farm equipment as well as buying considerable new labor-saving machinery. Implement dealers report a very good business in 1927. There has been extensive buying of tractors, likewise a large sale of grain combines. Other farm machinery was also purchased during 1927 in relatively much larger volume than in preceding postwar years.

The livestock situation in Montana improved in two respects during 1927. First, the bumper hay and feed crops restored reserves that had become depleted by the drought of 1926 in all eastern Montana and the more localized drought of 1925 in this same area as well as the drought of 1924 in the western third of the State. Second, the sharp rise in beef prices at last has placed the cattle industry on a par with the relatively favorable position enjoyed by the sheepman during the past four years. Prices for lambs, wool, and dairy products also continued favorable for producers during 1927.

The beef end of the cattle industry now occupies the center of the stage. The favorable 1927 grazing season and big feed supplies combined with high prices and a somewhat general understocking of ranges mark the point from which we may expect a strong increase in holdings over the period of the next few years.

Numbers of cattle on January 1, 1928, however, fell slightly below those of a year ago. This was presumably due to: (1) The unusually heavy 1926 marketings as the result of drought and consequent

reduction of breeding power; (2) the losses of 1927 spring calves in a very cold, wet, late spring.

The 1926 turn-off of 504,000 head from a January 1, 1926, inventory of 1,280,000 head was 38.8 per cent of this number, compared with the six-year (1920-1925) average ratio of turn-off to January 1 inventory of 20.6 per cent.

In 1927, while marketings fell well below those of 1926, they still represented 27.6 per cent of the January 1, 1927, inventory, indicating that the effect of high prices on first blush has been that of encouraging cattlemen to sell off all marketable stuff. Another factor in the 1927 marketings has probably been the high finish of range cattle as a result of the favorable grass season.

Since 1920 Montana has been marketing an increasing proportion of cow and yearling steer stuff, and in years of large increase in marketings the proportion of cows has increased strongly.

The number of steers per 100 cows decreased from 100 in the census of 1900 to 70 in 1910, to 59 in 1920, and to 33 in the census of 1925. At the same time the per cent of all steers that were 2 years old and over decreased from 64 per cent in the census of 1900 to 48 per cent in 1920 and to 39 per cent in a sample survey of holdings in 1926.

The high cost of beef production related to the low postwar prices of beef, as well as the preference in market demand for younger beef in recent years, have been lowering the age of Montana steers marketed. During postwar years liquidation pressure or drought have made considerable inroads into cow numbers, with the result that the turning point of the cycle finds many cattlemen who managed to stay in the business but with herds depleted and considerable unpaid debt.

On the other hand, a plentiful supply of new credit and renewed confidence on the part of bankers may be expected to bring about considerable expansion of numbers.

To what extent cattlemen will revert to the older steer type in view of the present high prices of heavy steers and thus reverse the trend of practice in recent years is uncertain, although some increase in holdings of older steers seems likely. On the other hand, the flexibility of the cow herd with the increase marketed as yearlings, on which basis cattlemen have been operating, offers quicker turnover and less depreciation risk. Many cattlemen may see in the present situation an opportunity to take advantage of the prospect in prices of the next few years by continuing to market their steers as rapidly as they can turn them off as yearlings.

Considering all phases of agriculture in Montana at present the situation may be said to be looking up, with the favorable 1927 crop season and the improvement in cattle prices being important sustaining factors.

J. G. DIAMOND,
Statistician for Montana, B. A. E.